extremities and 2 deaths. He said, however, that his object was to bring into prominent view the shadowy side of spinal anesthesia. He succeeded!

I have had no deaths in my series, but in 6875 cocaine analgesias reported by various authors, there were 24 deaths—I in 275; 7059 tropa-cocaine, 10 deaths—I in 705.9; 5636 stovaine, 7 deaths—I in 805; eucaine, 817—I death; novocaine, 947, 3 deaths—I in 315 2 3. (Strauss, Deut. Zeit. f. Chir., July, 1907.)

Among these are some that, strictly speaking, do not belong there, the deaths having occurred rather post hoc than propter hoc, so that Strauss, by careful selection, figures out a mortality of 1 in 2524. To illustrate how deceptive statistics are, the above table gives the relatively harmless tropa-cocaine a mortality of 1 in 705, while the far more dangerous stovaine gets off with I in 805. In the above reported cases, there are surely no concealments, the death rate is bad enough without. Compared with spinal analgesia, chloroform and ether are practically harmless; yet I do not think our case as bad as it may seem. The optimism and indiscriminate puncturing of the past is giving place to a saner attitude. The more poisonous drugs have been eliminated. Technic has been perfected, and operators have become more skillful, so that the future will show a decided improvement in the death rate and accidents after spinal analgesia. We must learn, moreover, to avoid such accidents as befell Koenig, and never inject where we suspect a diseased spinal cord. In such cases even the non-poisonous tropacocaine may have dire effects. If we can be sure of our ability to avoid such accidents in the future. spinal tropa-cocainization will have a fixed place amongst the accepted methods of anesthesia. it will ever rival ether or chloroform is out of the question, but it will have its uses and in selected cases will be the method par excellence.

Literature—1. Strauss—Present Status of Sp. Anesth. Deutsche Zeitschrift fur Chirurgie, July, 1907, Vol. 89, Nos. 1-4, p. 133. This work gives the complete literature of sp. analghesia up to the time of publication.

2. Bosse—"Die Lumbalanásthesie," by Dr. Buno Bosse, 1907, gives the best resume of the literature up to the present time. The following have appeared since:

Ach—Sp. Anesthesia. Munich Med. Woch., Aug. 13, 1907, No. 33.

Hesse—Complications after Sp. Analg. (tropacoc.), Deut. Med. Woch., 37, Sept. 12, 1907. (Ref. J. A. M. A.) Oct. 19, 1907.

- 3. Kronig—Gauss-Munch. Med. Woch., July 1, 1907. One thousand cases of Sp. Anesth. (Stovaineadren.) with Scop-Morph.
- 4. Oelsuer (Sonnenburg's Clinic) 875 cases Sp. Analgesia (Stovaine, novocaine, adrenalin, stovaine, adrenalin), Deut. Zeitschaf. chir. v. 90, Oct., 1907.
- 5. J. Oehler (Kummel's Clinic), 1000 cases of Sp. Analgesia (eucaine, stovaine, novocaine, alypin, finally tropa-cocaine with adrenalin). Beitragez. Klin-Chir., vol. lv., p. 425, Nov., 1907.
- 6. Uselessness of adrenalin in Sp. Anesthesia. Nickelssohn. Munich Med. Woch., Dec. 10, 1907, No. 50.

A PLEA FOR U. S. ARMY CONTRACT SURGEONS.

By H. du R. PHELAN, M. D., San Francisco.

The untimely death of Major Carroll of the Medical Department of the Army, brings out the fact that it was as a contract surgeon that he earned at the cost of his health and of his life the title of "Benefactor of Humanity," by the discovery of the agent of transmission of yellow fever.

As it will be remembered, in the year 1900, a commission was appointed to meet at Havana for the purpose of investigating the etiology of yellow fever then prevalent among our troops. This commission was composed of Dr. Walter Reed, Dr. James Carroll, Dr. Jesse W. Lazear and Dr. Aristides Agramonte. Carroll, Lazear and Agramonte were all three contract surgeons—that is, civilian physicians serving under contract with the Army. Dr. Reed alone held a commission in the regular establishment.

If I remember right, it was agreed among the several members of the commission that each in turn would expose himself to the bite of an infected mosquito in order to prove the theory of transmission of the disease by that insect. Contract Surgeon Carroll was the first to contract the disease experimentally, and this was all the more heroical that he had a wife and five young children depending on him for support. Contract Surgeon Lazear allowed himself in turn to be bitten, and soon after he gave up his life in behalf of science, leaving a widow and two children, the younger of whom he had never seen. Major Surgeon Reed was absent in the United States at the time his colleagues were exposing themselves to infection, and was never bitten experimentally by a yellow fever mosquito. Contract Surgeon Agramonte, as an immune, was a lesser hero but a no lesser scientific and painstaking member of the commission which fixed upon the mosquito stegomyia fasciata the odium of spreading yellow fever and death throughout the world.

The achievements of these contract surgeons should have been sufficient to attract attention to the anomalous position of a body of surgeons, the like of which exists in the army of no other nation; and yet it did not. Several contract surgeons, it is true, were taken into the regular establishment or otherwise honored, but the corps as a whole received a blow or two which deeply wounded the amour propre of its members.

For a short time contract surgeons were called Acting Assistant Surgeons, and wore the uniform and insignia of first lieutenants, the latter being of silver instead of gold. While officially they were civilians, yet they had the outward appearance of officers, and were therefore better able to maintain discipline and to otherwise perform the duties of their office. In 1901, immediately after the great discovery of Reed, Carroll, Lazear and Agramonte had startled the world, the corps of contract surgeons which already counted among its members several heroes or martyrs to science and to duty, received its first blow. The title of Acting Assistant Surgeon was denied it, and that of Contract Surgeon, which subsists till this day, was substituted

therefor. The shoulder straps, though of baser metal than those of commissioned officers, were torn from their shoulders. Following upon this, the letters "U. S.," which they had never dishonored, were removed from their collar band, and there remained on their uniform as sole ornaments a diminutive caduceus and the letters "C. S.," with which they are branded to this day.

In the early days of our Philippine venture, it was the corps of contract surgeons that was upon the scene in force. They were there by hundreds, scattered all over the islands, marching with troops, fighting with them; on the firing line, at the first aid stations, in hospitals—everywhere were the contract surgeons daily exposing their health and their lives without any hope of reward nor even of just treatment in case of misfortune. It is an undeniable fact that up to 1901, the pay of contract surgeons was stopped while they were sick or wounded, and that they were charged for hospital care as well. For several years also, during the most trying epoch of their history, they were not entitled to leave of absence like commissioned officers. Were leave ever granted them, it was only on condition that they provide a substitute at their own expense. It is also a fact that certain contract surgeons never obtained any leave at all during their term of service.

The troops which served in the Philippines from 1898 to 1901, and later, cannot fail to remember that in many instances the only doctor whom they ever knew in the field was a contract surgeon, and I am sure that in the majority of instances they remember him kindly.

Though officially civilians with no better status than that of camp followers, contract surgeons have nevertheless, with true soldierly spirit, sacrificed themselves upon the altar of patriotism. Take, for instance, Contract Surgeon St. John, who at the head of a command of thirty-eight men of Company A, Twenty-sixth U. S. V. Infantry, routed an insurgent outpost in Camarines Norte, only to be killed in the next encounter with the enemy. The body of this fighting doctor was abandoned on the roadside, exposed to the fury of the enemy until it was recovered the following day by other troops. Contract Surgeon Hulseberg, who was killed in an engagement at Majayjay, in August, 1900. Contract Surgeon Ross, who was also killed in action near Abra, in 1901. Contract Surgeon O'Neill, who was shot to death on the night of January 24, 1905, at San Francisco de Malabon, during an attack by the enemy. Contract Surgeon Snyder, recently killed in the Philippine Islands, whose funeral expenses were charged to his father, though he had given up his life to his country. In this instance at least, a tardy recognition of the sacrifice was made when the father was permitted to apply for reimbursement of expenses for burying his boy, not to exceed \$75.00!

Other cases of death in action could be cited were I able to recall them at this moment. But chough blood has already been shed to prove the worth of contract surgeons as soldiers. Deaths from disease incidental to service in the tropics, or wounds

received in action, are too numerous to mention, though they are additional evidence of real military service performed by these civilian physicians deemed unworthy of notice or of reward. The reports of commanding officers in the field abound with testimonials tending to show that the unfortunate "Contracts" were regarded as thorough gentlemen and most efficient officers. Several of them have even been recommended for a medal of honor, which was denied them on the ground that such reward is only for officers or soldiers, neither of which they happen to be. None could receive a brevet commission on the plea of civilian status. The enlisted men, quick to appreciate merit even among contract surgeons, have on several occasions during the war taken upon themselves to reward their officially ignored medical comrade by a presentation which met with the approval of those cognizant of the facts. Such rewards even are no longer permitted an officer, a contract surgeon being in this instance considered to be an officer, the regulations forbidding a superior to receive gifts from an inferior, though it is hard to see how an enlisted man can be inferior to a contract surgeon who has no military status at all.

True it is that, to-day, contract surgeons have less to complain of than in the past. In the Philippine Islands it appears that they perform less field work than formerly. But it must also be remembered that conditions in the islands are far different from what they were during the first five years of our occupation. It is not of hard service that the contract surgeons complain, for they have proven themselves equal to every task imposed upon them; it is not to small pay that they object, for they are willing to forego a portion of their salary under certain conditions; it is not to their social status among officers that they object, for they have, as far as I have noticed, been esteemed and respected for their personal traits or professional skill the same as if they were commissioned officers.

Their complaint is that they have no military status, no rank while serving in the capacity of medical officers of the army, through a defect in the law very easy to remedy. Rank and title are necessary in the military service, or they would long ago have become obsolete. The contract surgeon is as much in need of these prerogatives of officers as his more fortunate commissioned brethren for the performance of the military duties for which he is held to account irrespective of his civilian status.

A critic, discussing the Army Medical bill in the Military Affairs Committee room, once claimed that a sick soldier could be treated as well by a contract surgeon as by a captain or a major surgeon. This is true in so far as the sick soldier is concerned, but how about the feelings of the contract surgeon? By not having a military status, and through no fault of his own, he lives as under a cloud; he is suspected of being a medical man of inferior attainments or of blemished character, while in most instances the age limit alone forever debars him from applying for a commission in the regular service.

His name appears nowhere in the army register;

he is denied admission to certain, if not to many, military societies on the plea that he is not an officer; his claim to campaign medals, an inexpensive recognition of services in the field, has repeatedly been disapproved on the same plea, though a veterinarian, whose profession in civil life is not above that of a physician, is granted such medals iust as if he were an officer. And yet, it requires only a ruling of the Secretary of War to grant to contract surgeons this small and yet most coveted reward! The pay of a contract surgeon remains the same irrespective of home, foreign or length of service. He is denied commutation of quarters while serving as transport surgeon or when on duty at posts where there are no public quarters available, and must provide for himself as best he can. Through wearing a uniform devoid of insignia of rank, he has been mistaken for a band musician, a commissary sergeant or a steward, and is as likely to be passed unnoticed as to be saluted by enlisted men. from actual experience at army posts. The tenure of office of contract surgeons is uncertain. Though they sign a contract for a definite period, they may be retained indefinitely in the service, or their contract may be annulled any day, and they may be dismissed without trial and without redress by a chief surgeon of a department or of an army in the field or by the surgeon-general himself. This uncertainty as to their future also serves to dampen the zeal of otherwise capable and ambitious quasiofficers of recognized value.

Lastly, being allowed by existing regulations to wear nothing more handsome than a dark blue dress uniform devoid of shoulder straps and of other insignia of rank, and this attire not being prescribed for occasions of ceremony, contract surgeons must abstain from participating in any military function where officers are in full dress, or else appear in civilian clothes, which is out of place in most instances.

All these unnecessary and petty annoyances serve to render the life of contract surgeons unhappy, and breed discontent to the detriment of the service. The motives which prompt contract surgeons to accept service under such unfavorable conditions need not be dwelt upon at this time. The fact remains that as a corps they are an indispensable part of the medical department, and since they must serve in the capacity of officers with all the responsibilities and none of the privileges thereof, they should be commissioned.

An Army Medical bill which all contract surgeons have looked to as a remedy for existing evils, has repeatedly been sidetracked, though endorsed by the medical fraternity of the entire country and by the president as well. The American Medical Association through its journal recently said in despair that the medical profession at large had vainly endeavored to assist the army doctors, but that the latter appeared to do nothing for themselves, and that the only hope for them was in a concerted action from within. This seems incredible, and yet how seldom have contract surgeons ever raised their voice in their own behalf!

Our only hope is that the coming Congress will not overlook the unfortunate contract surgeons as it has so often done in the past. The Army Medical bill provides for the creation of a Reserve Medical Corps, U. S. Army, in lieu of the distasteful contract service. The passage of this bill would settle the question once for all, provided it be retroactive and take cognizance of service performed since 1898, in determining rank, pay and the right to campaign medals. BUT this excellent bill may never come to a vote, and it is in anticipation of this calamity, that it is deemed pertinent to sum up the wants of contract surgeons as follows:

- 1. The abolition of the name Contract Surgeon and the substitution therefor that of Acting Assistant Surgeon, the same as in the Navy and the Public Health and Marine-Hospital Service, or that of Assistant Surgeon Reserve Medical Corps, or that of Additional Assistant Surgeon, U. S. Army.
- 2. A definite status and the rank, title and pay of an officer, with a presidential commission while serving under any of the designations above given.
- 3. Recognition of past military service since 1898, either as volunteer or contract surgeon, in determining lineal rank in the new corps, and the right to campaign medals which are now denied contract surgeons who have earned them through participation in the various campaigns which they serve to commemorate.

If some measure is taken by Congress embodying these suggestions for the relief of contract surgeons whose claims are unquestionably well founded and just, the service will be benefited thereby.

A temporary commission for temporary service, but a commission nevertheless. Such is the plea of contract surgeons. May it be heard and heeded! Oct. 5, 1907.

CRIMES? OR MALADIES!* By ANTRIM EDGAR OSBORNE, M. D., Santa Clara.

It is not necessary to be very observant to notice in visiting public penal and charitable institutions, the strong similarity which exists among their inmates. True, some are being punished for crimes, while others are being cared for because of their mental and physical weakness; and yet in institutions, apparently as wide apart as a reform school and a home for feeble-minded, you will see the same cast of features and very many of the same physical characteristics. On a very slight acquaintance with the inmates, you will observe that many of them owe more to accident, influence, or the views of the committing magistrate for the fact that they are in one institution rather than in the other, than to the peculiar circumstances of their case; and in a somewhat extensive experience I have observed that frequently one judge will send the same class of boys and girls to a reform school, that his brother on the bench will commit to an institution for the care of

There is, of course, nothing new in this view

those afflicted with mental disorders.

^{*}Read before the Santa Clara County Medical Society, March 20, 1907.